REMARKS

Summary of the Office Action

Claims 19 and 26 are allowable.

Claims 33, 36 and 40 stand rejected under 35 U.S.C. § 112, first paragraph.

Claims 36 and 40 would be allowed if the time measuring mechanism limitation is removed from the claims.

Claims 43-48 have been rejected under 35 U.S.C. § 103(a) in view of U.S. Pat. No. 5,778,879 (*Ota*) and JP 01265939 (*Terada*).

Claim 49 stands rejected under 35 U.S.C. § 103(a) in view of *Ota*, *Terada* and U.S. Pat. No. 5,895,359 (*Peel*).

Summary of the Response to the Office Action

Claims 19, 26, 33-36, 40 are canceled without prejudice or disclaimer. These claims, or their equivalents, are being separately pursed in a continuation application as they represent subject matter that is patentably distinguishable from the claims herein. Accordingly, claims 43-49 remaining pending for consideration.

Applicants traverse the rejections of claims 43-49 and reiterate their prior request that an interference be declared with U.S. Pat. No. 6,547,741.

The Rejections of the Claims under 35 U.S.C. § 103(a)

Claims 43-49 have been rejected under 35 U.S.C. § 103(a) in view of *Ota*, *Terada* and *Peel*. Applicants respectfully traverse these rejections for the following reasons.

A. The combined art of Terada and Ota do not teach or suggest claim 43

Claim 43 recites a "method of measuring blood pressure using a wrist sphygmomanometer" including the step of "reading a value detected by said wrist sphygmomanometer with the wrist placed on the chest." This step is neither taught nor suggested by the combination of *Ota* and *Terada*.

Ota describes two embodiments of a blood pressure meter ("meter"). In the first embodiment, the meter is positioned away from the subject's chest, *see* Fig. 2, and its position relative to the heart is determined from an angle of inclination relative to the

horizontal. This embodiment is not relevant to claim 43, at least because the wrist-mounted meter is not placed on the chest. *Ota*'s second embodiment is described in Figs. 6-8 and the description beginning at col. 3, line 26. In this embodiment, a heart sound sensor 16 is said to be capable of locating a meter 12 at the height of the subject's heart based on a detected heart sound intensity. Fig. 7 shows a subject with meter 12 according to the second embodiment. Meter 12 is attached to the wrist and positioned at the approximate height of the heart, as indicated by arrows 15. According to *Ota*, the meter is correctly positioned when it is at the same height as, or aligned with the heart. *See* col. 3: 42-65. Surprisingly, *Ota* provides very little additional information about the assembly of, or method of using meter 12. In particular, *Ota* does not provide description relating to the assembly of meter 12 and, in particular, whether the sound sensor is located within a main housing, on the cuff, or contained within some appendage that is attached to the main housing.

Claim 43 recites "[a] method of measuring blood pressure using a wrist sphygmomanometer including a body . . . attached to the cuff in a manner to allow the body to be located on a thumb side of an arm . . . [and] reading a value detected by said wrist sphygmomanometer with the wrist placed on the chest." Thus, Applicants claim a method for measuring blood pressure that requires orientating the wrist so that the palm faces the chest, i.e., a pronated wrist, when a value is read from the device. In order to anticipate or render obvious claim 43, *Ota* would at least need to disclose an embodiment of meter 12 that requires placing a pronated wrist on the chest during heart sound intensity detection. *Ota* contains no such disclose.

There is nothing in *Ota* to suggest that a pronated wrist is placed on the chest when detecting heart sound intensity. Clearly, it is the heart sound sensor, if anything, that would be against the chest during heart intensity detection. But where does *Ota* teach or suggest that the heart sound sensor is located on or adjacent to the palm side of the wrist? One needs to know where the heart sensor is located before concluding that a pronated wrist is necessarily against the chest during heart intensity detection. For example, suppose that *Ota*'s heart sound sensor were located on the side of the housing. In this case, the meter's housing, or some extension thereof, would be against the chest,

but not necessarily a pronated wrist. *Ota* offers no clues as to the configuration of meter 12 or its method of use, only possibilities. "Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency." MPEP § 2112. For this reason, *Ota* taken in combination with any of the art of record does not teach or suggest claim 43.

To summarize, *Ota* taken alone, or in combination with the other art of record, does not teach or suggest claim 43, which recites "[a] method of measuring blood pressure using a wrist sphygmomanometer including a body . . . attached to the cuff in a manner to allow the body to be located on a thumb side of an arm[, and] . . . reading a value detected by said wrist sphygmomanometer with the wrist placed on the chest." Claim 43 requires that a pronated wrist is placed on the chest when a value is read from the sphygmomanometer. There is no disclosure in *Ota* to suggest that a pronated wrist is placed on the chest, nor is a pronated wrist position an inherent disclosure of *Ota*. Accordingly, claim 43 is not obvious in view of the art of record. Withdrawal of the rejections under 35 U.S.C. § 103(a) and allowance of claims 43-49 is earnestly solicited.

B. Even if the combination of Terada and Ota were to somehow teach all steps of claim 43, there is no motivation to combine these references without relying upon Applicants' disclosure

The rejection of claim 43 relies upon impermissible hindsight reconstruction when concluding that claim 43 would be obvious in view of *Ota* and *Terada*. Notwithstanding the fact that *Ota* nowhere teaches or suggests the placement of a pronated wrist on the chest, as discussed above, the Office Action further concludes that there is motivation for combining *Ota* with *Terada* in order to arrive at the invention recited in claim 43. Neither the prior art nor these references provide the motivation for this combination. Only the Applicants' disclosure provides the motivation.

Claim 43 is directed to a method for obtaining an accurate blood pressure reading using a wrist sphygmomanometer. In a preferred embodiment of this method, an accurate reading is facilitated by instructing a user to position the arm in a stable position (folded over the upper body) such that the wrist is pronated, and providing a device with

a display orientation that encourages a user to maintain the wrist in a pronated position during blood pressure measurements. For example, on page 11 of the specification:

> As soon as the blood pressure measuring device is applied to the user's left-hand wrist using cuff 1, the user intending to measure his blood pressure brings his arms into a position substantially folded over the upper part of his body, and his body in an essentially erect position (see FIG. 1). . . . To ensure a correct position for measurement, the blood pressure measuring device comprises a display device which is preferably arranged such as to be readable by the user only when the proper position is adopted. In particular[,] provision may be made for the display device to be arranged on the upper narrow side of the cuff 1, that is, in the area which, with the cuff applied, is located on the upper narrow side of the joint approximately in extension of the thumb.

This aspect of the invention is expressed in claim 43, which recites, inter alia, "[a] method of measuring blood pressure using a wrist sphygmomanometer including a body . . . attached to the cuff in a manner to allow the body to be located on a thumb side of an arm[, and] . . . reading a value detected by said wrist sphygmomanometer with the wrist placed on the chest." *Ota*'s meter discloses a method for locating the position of the heart. *Terada* discloses a display for a blood pressure measuring device that may be positioned on the narrow part of the wrist. However, there is no motivation for combining *Terada*'s device with *Ota*'s meter so as to arrive at a method for measuring blood pressure where a pronated wrist is on the chest and a value is read from the sphygmomanometer when the subject assumes this posture. Only the Applicants' disclosure provides this motivation. For this additional reason, the rejections under 35 U.S.C. § 103(a) should be withdrawn and claims 43-49 allowed.

C. Claim 49 is not taught or suggested by the combination of Tereada, Ota and Peel[1]

Claim 49, dependent from claims 44 and 43, recites the limitation of "a blood pressure measurement is automatically taken when the positioning system determines that the sphygmomanometer is at the appropriate measuring level." The Office Action contends that "Peel III is a device that . . . detects a condition and when the condition is satisfied . . . automatically triggers a [blood pressure] measurement." *Peel* contains no teaching or suggestion of a system that automatically triggers blood pressure

measurements when a condition is satisfied. *Peel* discloses logic for determining, after or during blood pressure measurements, whether a deviation in the measured oscillometric pulse was the result of a motion artifact, e.g., an acceleration of the arm or an arrhythmia, and makes the necessary corrections during data processing. The system makes this determination by analyzing waveforms of the measured pulse. The result of this waveform analysis does not automatically initiate, resume or suspend blood pressure measurements. *Peel* is therefore irrelevant to the limitations appearing in claim 49. The rejection of claim 49 is improper and should be withdrawn.

Peel's system is described as follows: a CPU that transmits and receives information from other instruments, computers and monitors through a communication interface and external inputs, etc. . . and receives input from control devices such as switches, keyboards, and touch screens through a communication interface. *See* col. 5: 32-44. In short, *Peel*'s disclosure is clearly not suitable for a wrist sphygmomanometer. Indeed, the Office Action points to no suggestion in *Peel* or any other art of record that *Peel*'s complex system, or any aspect thereof, may be utilized or adapted for use in a wrist sphygmomanometer. For this additional reason, the rejection of claim 49 based on *Peel* is improper and should be withdrawn.

There is also no motivation for combining *Peel*, *Ota* or *Terada*, assuming that this art actually discloses all limitations in claim 49. The claim recites an automatic blood pressure measurement capability for the sphygmomanometer when the subject has assumed an appropriate measuring level. This ensures that the subject will be able to more easily maintain a stationary position with the pronated wrist positioned on the chest. *Peel* refers to a system that has nothing to do with the need for maintaining correct posture during blood pressure measurements, and neither *Ota* nor *Terada* teach or suggest equipping a sphygmomanometer with the recited functionality so that a subject can more easily maintain a stationary position after the initiation of blood pressure measurements. Accordingly, there is no motivation in the art for combining *Peel* with

[1] We note that the Office Action states that the rejection of claim 49 is based only on the combination of *Peel* and *Terada*. We assume that the Examiner intended to include *Ota* in this rejection.

Terada and *Ota*, except if one looks to Applicants' disclosure. For this additional reason, the rejection of claim 49 based on *Peel* is improper and should be withdrawn.

For the foregoing reasons, Applicants' submit that claims 43-49 comply with the requirements for patentability under 35 U.S.C. § 103(a). Moreover, it is apparent that the U.S. Patent & Trademark Office agrees with Applicants' conclusion that these claims are patentably distinguishable over the art of record. Claims 43-49 are identical to claims 1-8 of U.S. Pat. No. 6,547,741.

Request for Interference Under 37 C.F.R. § 1.607

Applicants reiterate their December 19, 2003 request that an interference be declared with U.S. Pat. No. 6,547,741 ('741 patent).

CONCLUSION

Applicants' respectfully request allowance of claims 43-49 and a declaration of interference between Applicants' claims 43-49 and claims 1-8 of U.S. Pat. No. 6,547,741.

Favorable action is requested.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310.

Respectfully submitted,

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